

AMENDED CLAIMS

1.(Amended) A medical electrical lead comprising:

an elongated insulative lead body, having a tissue-contacting surface, a proximal end, and a distal end;

an elongated conductor having a proximal end and a distal end, mounted within the insulative lead body; and

B, an electrode coupled to the distal end of the electrical conductor form making electrical contact with bodily tissue; and

wherein the tissue-contacting surface of the insulative lead body comprises an overcoating of a non-porous polymer intimately mixed with a steroidal anti-inflammatory agent.

2. The medical electrical lead of claim 1 wherein the polymer is selected from the group of polyurethanes, silicones, polyamides, polyimides, polycarbonates, polyethers, polyesters, polyvinyl aromatics, polytetrafluoroethylenes, polyolefins, acrylic polymers or copolymers, vinyl halide polymers or copolymers, polyvinyl ethers, polyvinyl esters, polyvinyl ketones, polyvinylidene halides, polyacrylonitriles, copolymers of vinyl monomers with each other and olefins, and combinations thereof.

3. The medical electrical lead of claim 2 wherein the polymer is selected from the group of polyurethanes, silicones, or combinations thereof.

4. The medical electrical lead of claim 1 wherein the anti-inflammatory agent is a glucocorticosteroid.

5. The medical electrical lead of claim 4 wherein the glucocorticosteroid is selected from the group of cortisol, cortisone, fludrocortisone, Prednisone, Prednisolone, 6 α -methylprednisolone, triamcinolone, betamethasone,

dexamethasone, beclomethasone, acclomethasone, amcinonide, clobetasol, clocortolone, derivatives thereof, and salts thereof.

6. The medical electrical lead of claim 5 wherein the glucocorticosteroid is dexamethasone, a derivative thereof, or a salt thereof.

7. The medical electrical lead of claim 1 wherein the anti-inflammatory agent is coated onto the tissue-contacting surface.

8. The medical electrical lead of claim 1 wherein the tissue-contacting surface comprises an anti-inflammatory agent incorporated into a polymeric overcoating.

9. The medical electrical lead of claim 1 wherein the anti-inflammatory agent is impregnated into the polymer of the tissue-contacting surface.

10. The medical electrical lead of claim 1 wherein the anti-inflammatory agent is covalently bonded to the polymer of the tissue-contacting surface.

11. The medical electrical lead of claim 1 wherein the tissue-contacting surface further includes heparin.

12. A medical electrical lead comprising:
an elongated insulative lead body having a tissue-contacting surface, a proximal end, and a distal end;
an elongated conductor having a proximal end and a distal end, mounted within the insulative lead body; and
an electrode coupled to the distal end of the electrical conductor for making electrical contact with bodily tissue;

wherein the tissue-contacting surface of the insulative lead body consists essentially of an overcoating of a nonporous polymer intimately mixed with a steroidal anti-inflammatory agent.

26.(Amended) A method of modulating tissue encapsulation of a medical electrical lead comprising implanting the lead into a patient, wherein the medical electrical lead comprises:

an elongated insulative lead body having a tissue-contacting surface, a proximal end, and a distal end;

an elongated conductor having a proximal end and a distal end, mounted within the insulative lead body; and

an electrode coupled to the distal end of the electrical conductor for making electrical contact with bodily tissue; and

wherein the tissue-contacting surface of the insulative lead body comprises an overcoating of a non-porous polymer intimately mixed with a steroidal anti-inflammatory agent.

28.(Amended) A method of modulating degradation of a medical electrical lead comprising implanting the lead into a patient, wherein the medical electrical lead comprises:

an elongated insulative lead body having a tissue-contacting, a proximal end, and a distal end;

an elongated conductor having a proximal end and a distal end, mounted within the insulative lead body; and

an electrode coupled to the distal end of the electrical conductor for making electrical contact with bodily tissue; and

wherein the tissue-contacting surface of the insulative lead body comprises an overcoating of a non-porous polymer intimately mixed with a steroidal anti-inflammatory agent.

30.(Amended) A method of making a medical electrical lead comprising:

providing an elongated insulative lead body having a tissue-contacting surface, a proximal end, and a distal end; wherein the tissue-contacting surface comprises an overcoating of a non-porous polymer [in intimate contact] intimately mixed with a steroidal anti-inflammatory agent;

providing an elongated conductor having a proximal end and a distal end;

mounting the elongated conductor within the insulative lead body; and
coupling an electrode to the distal end of the electrical conductor for making electrical contact with bodily tissue.

31.(Amended) The method of claim 30 wherein the step of providing an elongated insulative lead body comprises blending the steroidal anti-inflammatory agent with the non-porous polymer and forming said tissue-contacting surface.

32. The method of claim 30 wherein the step of providing an elongated insulative lead body comprises coating a steroidal anti-inflammatory agent onto the tissue-contacting surface of the lead body.

35. The method of claim 30 wherein the step of providing an elongate body comprises coating a steroidal anti-inflammatory agent onto the tissue-contacting surface of the elongate body.